

AMENDMENTS

Please cancel claims 23-84 without prejudice and add new claims 85-90 as set forth below.

--85. A method of preparing an immunogenic composition, comprising the steps of:

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- (a) providing an autologous target diseased cell;
 - (b) increasing concentration of primary T cell activation molecules or costimulatory T cell activation molecules in the target diseased cell;
 - (c) providing a bridge molecule including one or more binding sites for one or more costimulatory molecules on a surface of one or more T cells of a patient mammal;
 - (d) attaching the bridge molecule to the target diseased cell; and
 - (e) collecting a pharmaceutically effective amount of the target diseased cell with the attached bridge molecule.

86. The method according to claim 85, wherein step (b) includes the step of treating the target diseased cell.

87. An immunogenic composition, comprising:
a pharmaceutically effective amount of one or more isolated or enriched dendritic cells or macrophages which presents one or more antigens associated with target hepatocellular carcinoma cells, target lymphoma cells, target colon carcinoma cells or target gastric cancer cells, wherein the dendritic cells or the macrophages have been (i) pulsed with the one or more antigens or (ii) transfected with nucleic acid capable of expressing the one or more antigens; and

a pharmaceutically effective amount of one or more bispecific monoclonal antibodies including

one or more binding sites for one or more CD28 or 4-1BB molecules, the one or more CD28 or 4-1BB molecules being located on a surface of one or more T cells of a patient mammal, and

one or more binding sites for the one or more antigens,

wherein the bispecific monoclonal antibodies are attached to the dendritic cells or the macrophages, and

wherein the dendritic cells or the macrophages are fused with the target hepatocellular carcinoma cells, the target lymphoma cells, the target colon carcinoma cells or the target gastric cancer cells of the patient mammal.

88. A method of preparing a pharmaceutical composition, comprising the steps of:

(a) providing a plurality of dendritic cells or a plurality of macrophages that are at least one of:

(i) pulsed with one or more antigens associated with target hepatocellular carcinoma cells, target lymphoma cells, target colon carcinoma cells or target gastric cancer cells, and

(ii) transfected with nucleic acid capable of expressing the one or more antigens;

(b) associating the one or more antigens with the dendritic cells or the macrophages;

(c) providing bispecific monoclonal antibodies including (i) one or more binding sites for one or more CD28 or 4-1BB molecules, the CD28 or 4-1BB molecules being located on a

surface of one or more T cells of a patient mammal, and (ii) one or more binding sites for the one or more antigens;

(d) attaching the bispecific monoclonal antibodies to the dendritic cells or the macrophages; and

(e) collecting a pharmaceutically effective amount of the dendritic cells or the macrophages with the bispecific monoclonal antibodies attached thereto, wherein the dendritic cells or the macrophages are fused with the target hepatocellular carcinoma cells, the target lymphoma cells, the target colon carcinoma cells or the target gastric cancer cells of the patient mammal.

89. The method according to claim 88, wherein steps (c) and (d) are both performed either before or after step (b).

90. The method according to claim 88, further comprising the step of:

(f) attaching the bispecific monoclonal antibodies to the one or more CD28 or 4-1BB molecules.--